

Coding Assignment 1

We have a student marks table containing subject wise marks. Students can attempt exams for the subject as many time he/she want. In the below example roll no: 1 student attempted DS exam twice. 1st time he got 25 marks, 2nd time he got 40 marks.

Input Dataframe:

| Roll No | Subject | Marks | Date |
|---------|---------|-------|----------|
| 1 | DS | 25 | 01-01-23 |
| 1 | Java | 40 | 02-01-23 |
| 2 | DS | 30 | 01-01-23 |
| 2 | Java | 26 | 02-01-23 |
| 1 | DS | 40 | 15-01-23 |
| 2 | Java | 50 | 15-01-23 |

Input frame contains multiple entries. So, in the output we want a unique **Roll no,Subject** entry. Where M1 is the latest marks, M2 is the second latest marks, M3 is third latest marks. E.g roll no 1 student scored 25 in 1st attempt and 40 in 2nd DS subject attempt. So, M1 = 40 (latest score) and M2 = 25 (second latest score). M3 = 0 (as there is no third attempt of these subjects). E.g 2: Suppose a student attempted the same subject 5 times. So only the last three attempts are considered, the rest two will be ignored. Date is the last attempted date. E.g M1 attempt date.

Output Dataframe:

| Roll No | Subject | M1 | M2 | M3 | Date |
|---------|---------|----|----|----|----------|
| 1 | DS | 40 | 25 | 0 | 15-01-23 |
| 1 | Java | 40 | 0 | 0 | 02-01-23 |
| 2 | DS | 30 | 0 | 0 | 01-01-23 |
| 2 | Java | 50 | 26 | 0 | 15-01-23 |